

This listing of claims will replace all prior versions and listings of claims in the application:

IN THE CLAIMS

Claims 1-9. (canceled)

10. (currently amended) Apparatus for separating a fiber suspension comprising a housing, a stator mounted centrally within said housing, a rotary screen rotatably mounted between said housing and said stator thereby dividing said housing into a screen chamber between said housing and said rotary screen and an accept chamber between said rotary screen and said stator, an inlet for providing said fiber suspension to said screen chamber, a reject outlet for withdrawing rejected fiber suspension from said screen chamber, and an accept outlet for withdrawing accepted fiber suspension from said accept chamber, said stator including at least one barrier member fixedly attached to said stator and extending axially along the length of said stator, said at least one barrier member extending radially from said stator to said rotary screen whereby said accepted fiber suspension is substantially prevented from tangentially passing said at least one barrier member and said at least one barrier member creates a pulse through said rotary screen, said at least one barrier member including a pulse surface facing said rotary screen, said pulse surface having a shape such that the distance between said pulse surface and said rotary screen decreases in the direction of rotation of said rotary screen, the decrease beginning ~~immediately following~~from the intersection of the barrier member and the stator.

11. (previously presented) The apparatus of claim 10 wherein said fiber suspension comprises a pulp suspension.

12. (canceled)

13. (previously presented) The apparatus of claim 10 wherein said at least one barrier member extends outwardly from said stator in an axial direction towards said accept outlet and faces in a direction towards the direction of rotation of said rotary screen.

14. (previously presented) The apparatus of claim 10 wherein said at least one barrier member extends radially outwardly from said stator at a predetermined angle.

15. (previously presented) The apparatus of claim 14 wherein said predetermined angle is perpendicular to the direction of rotation of said rotary screen.

16. (previously presented) The apparatus of claim 10 wherein said stator, said rotary screen and said housing each has the shape of a cylinder.

17. (previously presented) The apparatus of claim 10 wherein said rotary screen has the shape of a cone, with an increase in diameter in the direction facing towards said accept outlet.

18. (previously presented) The apparatus of claim 10 wherein said at least one barrier member comprises from 2 to 8 barrier members.

19. (previously presented) The apparatus of claim 18 wherein said at least one barrier member comprises from 3 to 4 barrier members.

20. (previously presented) The apparatus of claim 10 wherein the minimum distance between said at least one barrier member and said rotary screen is from 4 to 10 mm.

21. (previously presented) The apparatus of claim 10 wherein said at least one barrier member comprises the outer surface of said stator.

22. (currently amended) Apparatus for separating a fiber suspension through a rotary screen rotatably mounted

within a housing, said apparatus comprising a stator mountable centrally within said housing and said rotary screen, said stator including at least one barrier member fixedly attached to said stator and extending axially along the length of said stator, said at least one barrier member including a pulse surface facing said rotary screen, said pulse surface having a shape such that the distance between said pulse surface and said rotary screen decreases in the direction of rotation of said rotary screen, the decrease beginning ~~immediately following~~from the intersection of the barrier member and the stator.

23. (previously presented) The apparatus of claim 14, wherein said predetermined angle is an angle facing the direction of rotation of said rotary screen.